THE OFFICE OF REGULATORY STAFF DIRECT TESTIMONY

OF

DR. DOUGLAS H. CARLISLE SEPTEMBER 30, 2013



DOCKET NO. 2013-199-W/S

Application of United Utility Companies,
Incorporated for Adjustment of Rates and
Charges and Modifications to Certain Terms
and Conditions for the Provision of Water and
Sewer Service

September 30, 2013

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Docket No. 2013-199-WS

DIRECT TESTIMONY OF 1 2 3 DR. DOUGLAS H. CARLISLE 4 5 **FOR** 6 7 THE OFFICE OF REGULATORY STAFF 8 9 **DOCKET NO. 2013-199-WS** IN RE: APPLICATION OF UNITED UTILITY COMPANIES, INCORPORATED 10 FOR ADJUSTMENT OF RATES AND CHARGES AND MODIFICATIONS TO 11 CERTAIN TERMS AND CONDITIONS FOR THE PROVISION OF WATER AND 12 **SEWER SERVICE** 13 14 15 WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING? Q. 16 17 A. My purpose is to recommend the appropriate range for return on equity for United Utility Companies, Inc. ("United" or "the Company"). I will present my conclusions and 18 19 their bases for the appropriate return on equity for United. Q. WHAT STANDARDS GOVERN RATE OF RETURN? 20 The Supreme Court of the United States set standards in two landmark decisions. 21 In the first case, involving a water company, the Court declared: 22 23 24 A public utility is entitled to such rates as will permit it to earn a return on the value of the property which it employs for the convenience of the 25 public equal to that generally being made at the same time and in the same 26 general part of the country on investments in other business undertakings 27 which are attended by corresponding risks and uncertainties; but it has no 28 29 constitutional right to profits such as are realized or anticipated in highly profitable enterprises or speculative ventures. The return should be 30 reasonably sufficient to assure confidence in the financial soundness of the 31

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utility and should be adequate, under efficient and economical management, to maintain and support its credit and enable it to raise the money necessary for the proper discharge of its duties.¹

This decision, the <u>Bluefield</u> decision was later reinforced by the decision in another case, Federal Power Commission v. Hope Natural Gas Company:

[T]he fixing of "just and reasonable" rates, involves a balancing of the investor and consumer interests.... From the investor or company point of view it is important that there be enough revenue not only for operating expenses but also for the capital cost of the business. These include service on the debt and dividends on the stock..... By that standard the return to the equity owner should be commensurate with returns on investments in other enterprises having corresponding risks. That return, moreover, should be sufficient to assure confidence in the financial integrity of the enterprise, so as to maintain its credit and attract capital.²

Q. DOES UNITED HAVE TRADED COMMON STOCK?

- 19 A. No, its stock is entirely held by Utilities, Inc. of Northbrook, Illinois, which also
 20 has no publicly traded stock. Utilities, Inc. was purchased by Corix Utilities in 2012.
 21 Corix is owned by the British Columbia Investment Management Corporation.
- Q. IF NEITHER THE COMPANY NOR ITS PARENT HAS TRADED STOCK, HOW
 DID YOU PERFORM YOUR ANALYSIS TO RECOMMEND A RETURN ON
 EQUITY?
 - A. To develop a fair rate of return recommendation for United, I evaluated the return requirements of investors on the common stock of two groups of publicly held water and sewerage service companies. I then applied to these two groups two well-known and generally accepted methods for determining a recommended return on equity, the

¹ Bluefield Water Works & Improvement Company. v. Public Service Commission of West Virginia, 262 U.S. 679, 692-3 (1923).

² Federal Power Commission v. Hope Natural Gas Company, 320 U.S. 591, 603 (1944).

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Discounted Cash Flow ("DCF") Model, Comparable Earnings Model ("CEM"), and
Capital Asset Pricing ("CAP-M") Methods.

3 Q. WHY DID YOU EXAMINE DATA ON COMPANIES WITH TRADED STOCK?

A. First, United has asked to be treated as a publicly traded company by applying for a rate-based return-on-equity proceeding. Second, publicly traded water utilities are, after all, in the same line of business as United and so share similar risks. Third, data is far more readily available about publicly traded companies, so it is practical to use them.

HOW DID YOU SELECT THESE COMPANIES AND GROUPS?

For my DCF analysis I selected those companies classified as "water utilities" by Value Line or by *Yahoo! Finance* that engage in water distribution to customers and obtain most of their revenues from utility services. For my CEM analysis I selected companies with comparable β's to those of the companies in my DCF Proxy Group.

Q. WHAT CAPITAL STRUCTURE DID YOU USE FOR YOUR ANALYSIS OF UNITED?

I used the structure in Ms. Pauline Ahern's testimony at Exhibit PMA-1, Schedule 1, but not the cost rates. The Company's debt is higher than it would appear at first glance. The reason for this is Utilities, Inc.'s interest-only borrowing. Effectively, interest has been accumulating and will form a new basis to be repaid, so it acts like principle. I will discuss the ramifications of the interest-only loan later in my testimony.

Q. WHAT IS THE MOST IMPORTANT OVERALL CONSIDERATION IN DETERMINING AN APPROPRIATE RETURN ON EQUITY?

A. Determining comparability is the most important consideration. Under the Comparable Earnings Model, which I use, there is a set of assumptions about production

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and capital inputs. Under all other models, there are various assumptions about risk and these models all focus on adjusting risk to ascertain what companies are comparable to a regulated utility. As a preliminary step, each of these risk-adjustment models identifies some benchmark or standard reasoned to be central to investors' choices. For example, under the DCF, the stream of benefits or cash-flow from dividends, is central. Under the CAP-M, the Risk-Free Rate ("R_f") takes center stage. I will discuss these methods in more detail individually, later in my testimony.

Q. WHAT IS THE ROLE THAT ASSESSING RISK PLAYS IN ESTIMATING A

FAIR RETURN FOR UNITED?

For any regulated utility, one must determine the risks that the company faces in order to estimate a fair return. An appropriate return reflects the return investors require to incur the risk that they face. Economic principles dictate that the higher the risk, the higher the expected return. So too, the lower the risk, the lower the required return. A fair return, then, compensates investors proportionately to the risk they face. A fair return balances investors' and customers' interests. Too high a return places a burden on customers and over-rewards investors. Too low a return places too high a burden on the utility.

DCF Analysis

Q. WHAT IS THE BASIS FOR THE DCF MODEL?

A. This model's basic premise is that investors value stocks based on the stream of cash flows they can enjoy for the indefinite future and that the only certain flow of cash is the value of dividends received. The DCF is a perpetuity, so cash must flow indefinitely; therefore, in the long run, dividend growth cannot exceed company growth. If dividends

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grew faster than the underlying company growth, the dividend would eventually become unsustainable and the model's basic assumptions would be violated. The growth in dividends, therefore, cannot exceed the growth in earnings. In fact, all indicators of growth must, in the long run, grow at rates compatible with each other. The DCF model is expressed by this formula:

$$K = D_1/P_0 + g;$$

where K = cost of equity capital (ROE); $D_1 = current$ yearly Dividends per Share ("DPS"); $P_0 = cost$ purchase price; and cost = cost growth.

Q. HOW DO YOU TAKE INTO ACCOUNT THE ASSUMPTIONS ABOUT GROWTH IN YOUR ANALYSIS?

There are several steps for applying the assumptions of the DCF Model. Each strategy, in logical order, points to the next.

First, the DCF is a long-term model, so some temporary departures from a straight-line estimate of ROE are to be expected. This reasoning implies that having several indicators of growth is better than having just one. My analysis uses four indicators: 1) Earnings per Share ("EPS") (Exhibit DHC-2); 2) Book Value per Share ("BVPS") (Exhibit DHC-3); 3) Revenue or Earnings (Exhibit DHC-4); and, 4) Dividends per Share (Exhibit DHC-5).

Second, my analysis adheres to a steady-state model by using several periods to calculate historical trends and to dampen any temporary divergences. This method provides a more reliable guide to long-term growth. For that reason, I have used three-five- and ten-year averages/means and medians. This approach lessens the impact of any transient phenomena. Such reasoning appeals to common sense. For example, an

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investor would need some convincing evidence to believe that a company whose earnings and book value having been growing at 5% would suddenly grow at 25%. On the other hand, true departures from the trend have to be recognized.

Third, my approach recognizes the importance of analysts' opinions. Although it might seem that analysts make their living discovering new trends or departures from old ones, their predictions also moderate analyses based strictly on historical data and add some balance to the estimation of growth. Investors know about analysts and may consult them and be influenced by estimates.

HOW DOES YOUR DCF ANALYSIS CONFORM TO THE MODEL WITH REGARD TO THE OTHER TERMS OF THE BASIC DCF EQUATION?A.

The term, D₁/P₀, finds a simple expression as Dividend Yield. A very narrow interpretation of the formula would insist upon using a price from the previous year and determining the yearly dividend paid as of a year later. Investors know about companies' history of dividend increases, however, and they expect increases if a company has a history of increasing dividends. Companies announce their intention to maintain or increase their dividends during the year and price data tends to be an average of prices over time (as in Exhibit DHC-9), so the current dividend yield reflects what has happened leading up to the current moment. Thus the problem with the dividend yield is not knowing what it is at a given moment, but rather that investors expect it to grow. Since investors know that any given company may announce an increase in its dividend in the upcoming twelve months after the dividend yield information is available, a simple convention to recognize such possible increases is to multiply the yield by half-again the growth rate, producing this modified equation:

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 $K = ([D_1/P_0]*(1+(\frac{1}{2}g)]) + g$

While this equation may seem to violate the assumptions of the DCF by having dividends outpace growth or by restricting dividends to a growth rate below companies' growth rates, in fact it is consistent with the model. Expectations of growth are simply applied to dividend yield in this equation. Dividend yield is brought into balance with growth, because expectations are incorporated into both parts. The difference between how expectations are incorporated is that, for growth, they are incorporated in the development of the "g" number, whereas, in the dividend yield, they are incorporated in the equation itself.

Q. WHAT DOES YOUR DCF ANALYSIS INDICATE?

My DCF analysis indicates that the appropriate ROE for the Company is 9.60%. This number came partly from increased future dividends and dividend yields, partly pushed by changes in capital gains but was also came from the steady rate of increase and forecasted rates of increase in Sales, BVPS, and EPS (Exhibit DHC-6).

As discussed earlier, the effect of using multiple periods dampens the recent three-year trend EPS, which would have produced excessively high ROE's, had it been used alone. The long-term growth is slower than the short-term growth. The latter shows a sudden jump, and the median result shows that the greatest jumps came from the larger companies. The two largest companies, American States Water and American Water Works, had the highest gains in EPS, followed by SJW Corporation and another large company, Aqua America. All of these EPS results are shown at Exhibit DHC-2, p.2 of 3.

1 CEM Analysis

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2 Q. WHAT THE BASIC PREMISE OF THE CEM?

A. This Model focuses on the costs of goods and services that generate earnings. For this reason, CEM analyses look at changes in book value. Changes in book value indicate a greater capacity to produce.

6 Q. WHAT ARE THE MAJOR CONSIDERATIONS IN IMPLEMENTING THE CEM

AND HOW DID YOU ADDRESS THEM?

The Model does not indicate a single approach to ascertaining what is comparable and so analyses often look at great quantities of data over long periods of time. Analyses may use whole sectors of the economy, several sectors of the economy, or even stock indices and show several decades of results. While such approaches mitigate threats to the Model there is no single standard for comparability and so conclusions from the data tend to be judgmental. Although there is nothing wrong with applying judgment to interpret results, I have elected to use a more formulaic approach in order to make my analysis more transparent.

The standard I used to select comparable stocks was the range of β that Value Line provides for the companies in my DCF Proxy Group. Leaving aside academic arguments about its predictive value, β has intuitive appeal because stocks whose prices vary in the same manner as those of traded water and water and sewer companies probably have something in common with regard to their earning capacity. To further ensure comparability, I selected only stocks whose β 's for ten years did not stray very far out of the range of my DCF Proxy Group's. This approach produced a CEM Proxy

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Group that was fairly large – having 137 companies – and that covered several market sectors (Exhibit DCH-13).

3 Q. HOW DID YOU APPLY YOUR RATIONALE AND PRECAUTIONS WITH 4 REGARD TO THE CEM?

I determined the β's of the utility companies stocks composing my DCF Proxy Group (Exhibit DHC-7). I then used Value Line's database to select companies whose β's fell within this range and eliminated companies in the financial services sector. Removing financial companies was an application of judgment based on my conclusion that such companies would either lag the overall market or enjoy large rebounds due to the large role the financial sector played in the recession from which our country is still recovering. Either lagging or surpassing otherwise comparable companies would make the financial companies atypical and reduce comparability.

Having obtained a variety of companies with comparable β 's, I examined the tenyear β -ranges of the companies. Since the overall market has a β of "1," it is logical that the CEM Proxy Group should not contain any companies that were as risky as the overall market, so I eliminated any companies that had reached that level, which is .15 above the highest company in my DCF Proxy Group (Exhibit DHC-7). I placed a ten-year β -floor of less than .15 below the lowest company in my DCF Proxy Group. The selection procedures produced a CEM Proxy Group of 137 companies with many different lines of business among them. A.

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1 Q. WHAT INFORMATION ABOUT THESE CEM PROXY GROUP COMPANIES 2 DID YOU OBTAIN?

A. I obtained the ten-year book value growth for each company and the Value Line projected book value growth. I then calculated my CEM results from this group, using several different procedures.

Q. WHAT WERE THESE PROCEDURES AND WHY DID YOU TO USE SEVERAL PROCEDURES?

I first calculated the simple average or mean book value growth of the CEM Proxy Group, but I was aware that a few companies had rather extreme values. As a precaution against allowing a few companies to exert too much influence the calculation, I included the median of the values and then calculated the average of the mean and median growth in book value, for the historical ten-year period and for the predicted growth (Exhibit DHC-13).

As a defense against variation in book value growth among different levels of β , I divided the CEM Proxy Group into different β -ranges – stratifying the Group – by taking the mean and median of each range and then averaging the ranges. I averaged the stratified and unstratified results. To reflect the distribution of β 's within the DCF Proxy Group, I weighted the stratified results. I averaged this result with the previous result.

The average of the historical and projected book value results is a 10.174% growth in book value. The average of the stratified historical and projected book value results is 9.713%. These two results averaged together yield 9.943%. The average of the weighted stratified calculation was 9.262%. Averaging this number with 9.943% produces 9.603%, which is my CEM result (Exhibit DHC-13, p. 5 of 5). It should be

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noted that stratification receives more emphasis using my procedure as a means of ensuring comparability with water companies with traded stock.

3 Q. IS THIS METHODOLOGY BASED MOSTLY ON STRESSING THE 4 IMPORTANCE OF β?

No. Although β plays a major role in the analysis, the CEM Proxy Group contains a very wide diversity of companies, from IBM to PetSmart, from Microsoft to Johnson & Johnson. The CEM is influenced by several sectors of business, each with its own characteristics apart from how its stocks co-vary with the market. Furthermore, this methodology stresses book value growth, as opposed to dividends or the hurdle- or risk-free-rate.

CAP-M Analysis

12 Q. WHAT IS THE BASIC PREMISE OF THE CAP-M?

A. This model assumes that there is a knowable R_f, Market Rate of Return ("R_m"), and Equity Risk Premium ("ERP"). In this respect, it belongs to a family of models and methods for which a risk premium is central. The CAP-M uses the β statistic to adjust the ERP for the risk of particular companies, sectors, or even portions of companies.

17 Q. HOW IS THE PREMISE REALIZED IN CAP-M ANALYSIS?

18 A. At the basic, general level, CAP-M uses the following formula:

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$$K = R_f + (\beta * (R_m - R_f)),$$

Where K is ROE and the other notations are those I have discussed. The innermost parentheses contain the ERP, which is adjusted for risk by β , with the assumption that all risks not captured by β can be diversified away.

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Q. WHAT ARE SOME OF THE ISSUES SURROUNDING THE CAP-M AND ITS APPLICATION?

There have been debates about whether β properly measures systematic risk, with some researchers finding that it does not and others finding that it does. Some people have taken issue with whether β should be adjusted, which is not an issue with my analysis, since I use Value Line's adjusted β 's. Another set of issues turns on whether the R_m is properly measured by the source, SBBI (a.k.a. "the Ibbotson book") or whether different periods of time should be used. Within that debate is another one on whether to use the arithmetic mean ("simple average") or the geometric mean (or "compound annual growth rate"). I use the latter because it reflects the long-term returns that stocks could actually have brought an investor.

Although those are the prominent debates, there is another issue concerning the third term of the CAP-M equation, R_f . Although one could argue about whether highly rated corporate bonds are truly risk-free or whether one should use longer- or shorter-term Treasury securities, such discussions are completely overshadowed by the question of whether actions by the Federal Reserve Board have masked or distorted market forces in such a way or in such a degree that the R_f has been unknowable.

Q. DO YOU BELIEVE THAT THE ISSUE WITH THE R_f IN THE CAP-M HAS BEEN OVERCOME?

While it may have been a concern when the Federal Reserve initiated its "Twist" policy of buying long-term Treasury securities, I believe that this concern is rapidly disappearing. My reasoning is twofold. First, there are clear signs that the Federal Reserve's policy is coming to an end, albeit a very gradual one, and there are definite

market responses anticipating the end of the policy. Second, it is possible that the policy will end sooner for longer-term securities than for shorter-term ones. This second reason is that the "Twist" policy came about later than the initial intervention and the market has already anticipated an exit from it as demonstrated by the increasing steepness of the yield curve (see Exhibit DHC-11). Since I consider the CAP-M to be more accurate either when there is notable interaction between idiosyncratic risk and β^3 or in the long-run⁴, recent reactions to the mere possibility of a slowing of Federal Reserve purchases, sometimes called the "taper," indicate that it is not too soon to use the CAP-M again.

All professional economists who were polled by <u>Blue Chip</u> responded that they thought the Taper would begin this year⁵. In other words, almost all of the economists thought that Quantitative Easing – the Federal Reserve's purchasing of \$85 billion per month in Treasury and mortgage-backed securities – would begin to end this year. A decrease in purchases of Treasury securities by the Federal Reserve will decrease their price and increase their interest rates. With higher governmental rates, the hurdle that corporate bonds will have to clear in order to attract investors will be higher, so it is likely corporate bond rates will rise, too. For the CAP-M, the effect upon Treasury securities is the more important and more direct effect of the termination of Federal Reserve policy. Market forces will once again set the R_f, and we will have a good idea of what the ERP is. In fact, the interest rates of Treasury bonds are already starting rise, which indicates that the market is "pricing in" this upcoming change.

³ "Beta Is Still Useful!" a paper byYexiao Xu and Yihua Zhao, School of Management, The University of Texas at Dallas, November 2011 revision.

⁴ Ravi Jagannathan and Ellen R. McGrattan, "The CAPM Debate," <u>Federal Reserve Bank of Minneapolis Quarterly Review</u>, Vol. 19, No. 4, fall 1995, pp. 2-17.

⁵ Blue Chip Financial Forecasts, Vol. 32, No.8, August 1, 2013, p.14.

1 Q. HOW DID YOU PERFORM YOUR CAP-M?

A. For the R_f I used the projected 30-year Treasury bond yield, using a projection from a poll of economists conducted by <u>Blue Chip</u>TM. This consensus forecast looks 18 months into the future. It is currently 4.1% (Exhibit DHC-8). For the R_m, I used the compound average growth rate for stocks as published in <u>Stocks</u>, <u>Bonds</u>, <u>Bills and Inflation</u>, <u>2013</u>. I averaged the returns for the deciles of company size and obtained an average (geometric mean or compound annual growth rate) of 11.1% (Exhibit DHC-8). The ERP is the difference of these two numbers, or 7.0%. The average β for the water companies in my DCF Proxy Group is 0.68. When one multiplies 7.0% by 0.68, the result is 4.76%, which is the risk-adjusted ERP. This step is necessary because not all equities are equally risky, so it is necessary to take into account how they vary with other equities, which is what β measures. The calculation shows that a company comparable to United should receive 4.76% above the R_f, which is 8.86% (Exhibit DHC-8).

Conclusion

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15 Q. WHAT IS THE RANGE OF YOUR RESULTS?

- 16 A. The top of my range is 9.60%, my CEM and DCF results rounded to the second percentile decimal, and the bottom of my range is 8.86%, my CAP-M result.
- Q. DO YOU HAVE A RECOMMENDATION WITHIN YOUR RANGE, BASED ON
 ANY SPECIAL CONSIDERATIONS THAT YOU BELIEVE APPROPRIATE
 FOR EVALUATING YOUR RANGE?
- A. I suggest that more weight be placed on the bottom end of the range. The parent company undertook an expensive form of debt at rates that were above the market at the time the debt was incurred and has shown no inclination to dilute that expensive rate.

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Utilities, Inc. cannot escape the debt by paying off earlier without being required to make the lenders whole immediately and it has chosen to make significant payments by having an interest-only phase of the loan. Undoubtedly, some portion of what the Company's customers pay in their bills goes to pay the excessive interest incurred by the parent company. Since the risk posed by this high rate did not arise because of any actions of United, United's customers should not have to pay for it. Accordingly, I recommend the lower end of my range.

8 Q. DOES THIS CONCLUDE YOUR TESTIMONY?

9 A. Yes, it does.

Office of Regulatory Staff
Economic Overview
United Utility Companies, Inc.
Docket #2013-199-WS

A Review of Some Major Events of the Recession and Recovery

Over the past five-and-a-half years, the United States has experienced dramatic economic changes. The landmark for these changes was the March 2008 insolvency of Bear Stearns. The firm's hedge funds held subprime mortgages with large losses, leading to its sale to J. P. Morgan Chase. The trouble spread to major Wall Street firms that had loaned money on the basis of assets that turned out to be worth less than thought. Falling prices of houses and equities reduced the wealth of households and created uncertainty about the economy. The S&P 500 Index fell as much as 50% during 2008 and housing prices fell 13% in the twelve-month run-up to the recession. A large number of banks and other financial institutions had balance sheets that were suddenly deemed untrustworthy because they reflected holdings of securities whose underlying value was tied to houses purchased with nontraditional mortgages. The best known example of the sudden collapse in trust is the bankruptcy of Lehman Brothers on September 15, 2008, the largest bankruptcy filing in U.S. history, with Lehman holding over \$600 billion in assets.\frac{1}{2}

When falling housing prices led to defaults and foreclosures, the value of corporate assets suffered. Moreover, some financial instruments, such as credit default swaps, greatly magnified the effects of declining value. Fannie Mae lost \$29 Billion on Write-Downs. The Federal Reserve announced that it planned to buy up \$600 billion in debt and mortgage-backed securities from Fannie

¹ "Lehman folds with record \$613 billion debt". Marketwatch. 2008-09-15. http://www.marketwatch.com/news/story/story.aspx?guid={2FE5AC05-597A-4E71-A2D5-989FCC290520}&siteid=rss. Retrieved on 2008-09-15.

Mae, Freddie Mac and Ginnie Mae, the three government-sponsored finance firms established to promote home ownership.

As a result of steep drops in the value of assets and a dramatic drop in the willingness to lend, the Federal Reserve began a series of cuts in the Federal Funds Rate, the rate at which it lends banks money, starting with a half percent cut to 5.75% on August 16, 2007 and culminating in a drop on December 16, 2008 to a range between 0.0% and 0.25%. On November 10, 2008, the US Treasury announced investment of 40 billion dollars in preferred stock of AIG. In the First Quarter of 2009, the Federal Reserve purchased \$1.25 trillion in mortgage-backed securities and \$200 billion in agency debt.

On March 18, 2009, the Federal Reserve announced plans to purchase up to \$300 billion of longer-term Treasury securities. On June 24, 2009, it reiterated its plans to buy Treasury securities. Because the Federal Reserve had set rates near zero already, it could not cut them much. If there were deflation, real interest rates would rise, so its latest move circumvented the limitations of interest-rate policy by injecting liquidity directly into the monetary system through a variety of devices but especially through special credit facilities.²

The Federal Reserve's special programs were designed to ease credit in the face of illiquidity arising from the credit crisis that was both cause and result of the recession. Two measures of illiquidity, the "TED Spread" and the "OIS-LIBOR Spread" had widened dramatically (see Exhibits DHC-1a). The former is the difference between the Three-Month U.S. Treasury Bill rate and the London Interbank

Federal Reserve Bank of St. Louis: January 2009 "Man the Lifeboats!" By Kevin L. Kliesen; and,

² Most of the rest of the above discussion comes from these sources:

[&]quot;The Global Economic & Financial Crisis: A Timeline," Mauro F. Guillén Director of the Lauder Institute, Wharton School, University of Pennsylvania [no date; see: http://lauder.wharton.upenn.edu/pages/pdf/class info/Chronology Economic Financial Crisis.pdf]

Offered Rate ("LIBOR").³ The latter is the difference between the Overnight Indexed Swap ("OIS") and LIBOR (see Exhibit DHC-1b). Both of these indicators shot up during the credit crisis, but returned to near-normal levels. As a result of the return to a more normal credit situation, the Federal Reserve let these special facilities lapse.⁴

As some measure of confidence returned among financial institutions, lingering distrust and the prospect of deflation led the Federal Reserve to begin its "Quantitative Easing" ("QE") policies in late 2008. Under these policies, the Federal Reserve sought to overcome the "Zero Bound" problem: the inability to lower interest rates below zero. By buying US Treasury securities, the QE policies effectively lowered interest rates below zero in order to avoid deflation, economic stagnation or decline, and to stimulate the economy. Part of this effort involved a shift into Treasury bonds away from shorter-term instruments, a policy partly begun in the second stage of QE. The policy, known as the "Twist," involved the Federal Reserve's getting out of shorter term Treasuries and into Longer-Term Treasuries in order to stimulate lending in capital projects. As there have been indications that the Federal Reserve is about to slow its purchases of Treasury securities, interest rates have increased. At the same time, additional financial pressure has been placed on companies by recent changes in tax law, which increases the capital gains tax on stock dividends and therefore the need for companies to increase their dividend yields. Nonetheless, as GDP continues to grow and unemployment declines very slowly, the very slowness of recovery from the recession five years ago should help companies with reliable growth.

Currently, the Federal Reserve remains on course, instructing the Federal Reserve Bank of New York to purchase \$85 billion per month, divided between mortgage-backed securities and longer-term Treasury securities. In July, the Federal Reserve's Open-Market Committee maintained a target inflation

³ It used to be the difference between the Euro-Dollar futures contract and the Three-Month U.S. Treasury Bill rate, thence the name "TED" ("Treasury/Eurodollar")

⁴ Federal Reserve Statement, January 2009: http://federalreserve.gov/newsevents/press/monetary/20090128a.htm

rate of no more than 2% and the target unemployment rate of 6.5%.⁵ Leading up to this meeting there was some pulling back in stock values, tracked by the Federal Reserve itself:

	Indicator	2010	2011	2012	Oct 2012	Nov 2012	Dec 2012	Jan 2013	Feb 2013	Mar 2013	Арг 2013	May 2013	Jun 2013
				Pric	es and	trading	volume	(averaç	es of d	aily figu	ıres)		
	Common stock prices (indexes)												
1	New York Stock Exchange (Dec. 31, 1965=50)	7,233 54	7,862.45	8,008.24	8,295.67	8,129.90	8,367.74	8,759.89	8,896.97	9,038.29	9,092.21	9,440.35	9,204,
	Standard &												
2	Poor's Corporation (1941-1943=10) ¹	1,139.97	1 267 64	1,379.35	1,437.82	1,394.51	1,422.29	1,480.40	1,512.31	1,550.83	1,570.70	1,639.84	1,618,
П	American Stock Exchange (Aug.	1,939.79	2,285.19	2,377.55	2,430 56	2,370.36	2,374.90	2,399.22	2,392.41	2,401.79	2,377.81	2,421.10	2,311.

⁵ Minutes of the Federal Open Market Committee, July 30-31, 2013. See: http://www.federalreserve.gov/monetarypolicy/fomcminutes20130731.htm

⁶ http://www.federalreserve.gov/econresdata/releases/stockstats/current.htm

Anxiety about "tapering," led to reactions such as this one reported in <u>Bloomberg/Business</u>

<u>Week</u>: "U.S. stocks fell, giving the Dow Jones Industrial Average its longest slump in 13 months, as minutes of the Federal Reserve's July meeting showed officials support stimulus cuts this year if the economy improves." The market is beginning to react and to place prices on the consequences of gradual Federal Reserve withdrawal from its current policies. While the Federal Reserve may not initiate the Taper on any set schedule, there is little doubt that the change is coming and investors in the stock market believe it is coming.

⁷ Bloomberg News, "U.S. Stocks Fall as Fed Minutes Show Support for Tapering," by Lu Wang and Alex Barinka August 21, 2013. http://www.businessweek.com/news/2013-08-21/u-dot-s-dot-stock-index-futures-decline-before-federal-reserve-minutes

Office of Regulatory Staff

United Utility Companies, Inc.

Earnings per Share -- Historical Data

Docket #2013-199-WS

		1			1							
	\$ per share	are										
COMPANIES / YEARS	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012*
American States Water	\$1.35	\$1.34	\$0.78	\$1.05	\$1.32	\$1.33	\$1.62	\$1.55	\$1.62	\$2.22	\$2.24	\$2.82
American Water Works								\$1.10	\$1.25	\$1.53	\$1.72	\$2.11
Aqua America	\$0.51	\$0.54	\$0.57	\$0.64	\$0.71	80.70	\$0.71	\$0.73	\$0.77	\$0.90	\$1.04	\$1.09
Artesian Resources		\$0.76	\$0.64	\$0.72	\$0.81	20.97	\$0.90	\$0.86	20.97	\$1.00	\$0.83	\$1.13
California Water	\$0.47	\$0.63	19.08	\$0.73	\$0.74	20.67	\$0.75	\$0.95	\$6.08	\$0.91	\$0.86	\$1.02
Connecticut Water Service	\$1.13	\$1.12	\$1.15	\$1.16	80.88	\$0.81	\$1.05	\$1.11	\$1.19	\$1.13	\$1.13	\$1.53
Middlesex Water	\$0.66	\$0.73	19.08	\$0.73	\$0.71	\$0.82	\$0.87	\$0.89	\$0.72	\$0.96	80.84	\$0.90
SJW Corp.	\$0.77	80.78	\$0.91	\$0.87	\$1.12	\$1.19	\$1.04	\$1.08	\$0.81	\$0.84	\$1.11	\$1.18
York Water Co.	\$0.43	\$0.40	\$0.47	\$0.49	\$0.56	\$0.58	\$0.57	\$0.57	\$0.64	\$0.71	\$0.71	\$0.72

Source: Value Line, Exhibit DHC-9
Ratios of Change or

	Kanos of Char		e over	Frevio	us rear							
COMPANIES / YEARS	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
American States Water	1.05	0.99	0.58	1.35	1.26	1.01	1.22	96.0	1.05	1.37	1.01	1.26
American Water Works									1.14	1.22	1.12	1.23
Aqua America	1.09	1.06	1.06	1.12	::	0.99	1.01	1.03	1.05	1.17	1.16	1.05
Artesian Resources			0.84	1.13	1.13	1.20	0.93	96.0	1.13	1.03	0.83	1.36
California Water	69.0	1.34	0.97	1.20	1.01	0.91	1.12	1.27	1.03	0.93	0.95	1.19
Connecticut Water Service	1.04	0.99	1.03	1.01	0.76	0.92	1.30	1.06	1.07	0.95	1.00	1.35
Middlesex Water	1.29	1.11	0.84	1.20	0.97	1.15	1.06	1.02	0.81	1.33	0.88	1.07
SJW Corp.	1.33	1.01	1.17	96.0	1.29	1.06	0.87	1.04	0.75	1.04	1.32	1.06
York Water Co.		0.92	1.18	1.04	1.14	1.04	0.98	1.00	1.12	1.11	1.00	1.01

Office of Regulatory Staff

United Utility Companies, Inc.

Earnings per Share -- Historical Summary Docket #2013-199-WS

	10-yr Av	verages	5-yr. Averages	erages	3-Yr. Av	/erages	
COMPANIES	Compound	Simple	Compound	Sim	Compound	Simple	
American States Water	7.72%	10.51%	11.72%	12.	20.29%	21.28%	
American Water Works					19.07%	19.16%	
Aqua America	7.28%	7.43%	8.95%	9.11%	12.28%	12.42%	
Artesian Resources	4.05%	5.23%	4.66%	6.12%	5.22%	7.41%	
California Water	4.94%	5.61%	6.34%	7.16%	1.34%	1.99%	
Connecticut Water Service	3.17%	4.44%	7.82%	8.66%	8.74%	10.12%	
Middlesex Water	2.12%	3.33%	0.68%	2.23%	7.72%	9.33%	
SJW Corp.	4.23%	5.57%	2.56%	4.20%	13.36%	14.05%	
York Water Co.	%50.9	6.25%	4.78%	4.93%	.93% 4.00% 4.12%	4.12%	
							Average of
Means	4.94%	6.05%	5.94%	%06.9	10.23%	11.10%	Period
Medians	4.58%	5.59%	2.56%	6.64%	8.74%	10.12%	Averages
Average of Mean & Median		5.29%		6.26%		10.04%	7.20%
						=	•

EXHIBIT DHC-2 Page 3 of 3

Office of Regulatory Staff

United Utility Companies, Inc.

Earnings per Share -- Estimates & Overall Summary

	value i	,me			
COMPANIES	S.S	S,0%	Zacks	Yahoo	Reuters
American States Water	3.25	3.61%	2.00%	2.00%	2.00%
American Water Works	2.85	7.81%	7.74%	8.05%	9.04%
Aqua America	1.60	10.07%	5.27%	4.90%	6.27%
Artesian Resources	1.24	4.75%	14.95% ≠	4.00%	19.42%
California Water	1.35	7.26%	%00.9	%00'9	12.94%
Connecticut Water Service	1.75	3.42%	2.00%	2.00%	2.00%
Middlesex Water	1.15	6.32%	2.04% ≱	2.70%	%90.9
SJW Corp.	1.60	7.91%	7.58% *	14.00%	3.73%
York Water Co.	0.90	5.74%	10.39% *	4.90%	4.85%
		6.32%	6.77%	5.73%	7.70%
		6.32%	6.00%	4.90%	6.06%
		6.32%	6.39%	5.31%	6.88%

^{*}Value Line, see Exhibit DHC-9; % =Compound Annual Growth Rate

[&]quot;Yahoo"=Yahoo!Finance web site

[/] Estimated growth for this year over next

Office of Regulatory Staff

United Utility Companies, Inc.

BVPS -- Historical Data Docket #2013-199-WS

	e bei silare	ale										
COMPANIES / YEARS	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
American States Water	\$13.22	\$13.22 \$14.05	\$13.97	\$15.01	\$15.72	\$16.64	\$17.53	\$17.95	\$19.39	\$20.26	\$21.68	\$23.61
American Water Works								\$25.64	\$22.91	\$23.59	\$24.11	\$25.10
Aqua America	\$4.15	\$4.36	\$5.34	\$5.89	\$6.30	\$6.96	\$7.32	\$7.82	\$8.12	\$8.51	\$9.01	29.87
Artesian Resources		\$9.65	\$9.01	\$9.26	89.60	\$10.15	\$11.66	\$11.86	\$12.15	\$12.44	\$13.12	\$13.57
California Water	\$6.48	86.56	\$7.22	\$7.83	87.90	20.68	\$9.25	\$9.72	\$10.13	\$10.45	\$10.76	\$11.30
Connecticut Water Service	\$9.25	\$10.06	\$10.46	\$10.94	\$11.52	\$11.60	\$11.95	\$12.23	\$12.67	\$13.05	\$13.50	\$16.89
Middlesex Water	\$7.11	\$7.39	87.60	\$8.02	\$8.26	\$9.52	\$10.05	\$10.03	\$10.33	\$11.13	\$11.27	\$11.48
SJW Corp.	\$8.17	\$8.40	\$9.11	\$10.11	\$10.72	\$12.48	\$12.90	\$13.99	\$13.66	\$13.75	\$14.20	\$14.68
York Water Co.	\$3.79	\$3.90	\$4.06	\$4.65	\$4.85	\$5.84	\$5.97	\$6.14	\$6.92	\$7.19	\$7.45	\$7.73

Source: Value Line, Exhibit DHC-8

	Ratios of Char	Chang	ge over	Previo	us Year							
COMPANIES VEARS	2001	2002	2003	2004	2002	2006	2007	2008	2009	2010	2011	2012
American States Water	1.04	1.06	0.99	1.07	1.05	1.06	1.05	1.02	1.08	1.04	1.07	1.09
American Water Works									0.89	1.03	1.02	1.04
Aqua America	1.08	1.05	1.22	1.10	1.07	1.10	1.05	1.07	1.04	1.05	1.06	1.10
Artesian Resources			0.93	1.03	1.04	1.06	1.15	1.02	1.02	1.02	1.05	1.03
California Water	1.00	1.01	1.10	1.08	1.01	1.15	1.02	1.05	1.04	1.03	1.03	1.05
Connecticut Water Service	1.04	1.09	1.04	1.05	1.05	1.01	1.03	1.02	1.04	1.03	1.03	1.25
Middlesex Water	1.02	1.04	1.03	1.06	1.03	1.15	1.06	1.00	1.03	1.08	1.01	1.02
SJW Corp.	1.03	1.03	1.08	1.11	90.1	1.16	1.03	1.08	0.98	1.01	1.03	1.03
York Water Co.		1.03	1.04	1.15	1.04	1.20	1.02	1.03	1.13	1.04	1.04	1.04

Office of Regulatory Staff

United Utility Companies, Inc.

Book Value per Share -- Historical Summary, Estimates & Overall Summary

	5.5mm. 11 01	2.S	STATE OF THE SECTION	CAST IN		2.9	
COMPANIES	Compound	Simple	Compound	Simple	Compound Simple	Simple	
American States Water	5.33%	5.36%	6.14%	6.16%	6.78%	6.80%	
American Water Works					3.09%	3.09%	
Aqua America	8.51%	8.63%	6.16%	6.18%	6.72%	6.74%	
Artesian Resources	3.46%	3.58%	3.08%	3.09%	3.77%	3.78%	
California Water	5.59%	2.66%	4.08%	4.09%	3.71%	3.71%	
Connecticut Water Service	5.32%	5.51%	7.16%	7.50%	10.06%	10.52%	
Middlesex Water	4.50%	4.58%	2.70%	2.73%	3.58%	3.62%	
SJW Corp.	5.74%	5.86%	2.62%	2.68%	2.43%	2.44%	
York Water Co.	7.08%	7.24%	5.30%	5.37%	3.76%	3.76%	
							Average of
Means	2.69%	5.80%	4.66%	4.72%	4.88%	4.94%	Period
Medians	5.46%	5.59%	4.69%	4.73%	3.76%	3.76%	Averages
Average of Mean & Median		5.64%		4.70%		4.33%	4.89%

EXHIBIT DHC-3 Page 3 of 3

Office of Regulatory Staff

BVPS -- Estimates & Summary United Utility Companies, Inc.

Docket #2013-199-WS

	Value Line*	Line*
COMPANIES	S.S	S,0%
American States Water	\$24.25	0.67%
American Water Works	\$30.00	4.56%
Aqua America	\$13.30	7.74%
Artesian Resources		
California Water	\$15.00	7.34%
Connecticut Water Service	\$20.40	4.83%
Middlesex Water	\$12.90	2.96%
SJW Corp.	\$19.15	6.87%
York Water Co.	\$8.60	2.70%
		4.71%
		4.71%
		4.71%

*Source: Exhibit DHC-9

Office of Regulatory Staff

United Utility Companies, Inc.

Sales/Revenues -- Historical Data

				CALL HARAS AND AND	2						
	\$-000,000	s,00									
COMPANIES / YEARS	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012*
American States Water	\$209.20 \$212.70	\$212.70	\$228.00	\$236.20	\$268.60	\$301.40	\$318.70	\$361.00	\$398.90	\$419.30	\$466.90
American Water Works							• -		\$2,710.70	\$2,666.20	\$2,876.90
Aqua America	\$322.00	\$322.00 \$367.20	\$442.00	\$496.80	\$533.50	\$602.50			\$726.10	\$712.00	\$757.80
Artesian Resources	\$34.60	\$36.30	\$39.60	\$45.30	\$47.30	\$52.50			\$64.90	\$65.10	870.60
California Water	\$263.20	\$277.10		\$320.70	\$334.70	\$367.10	\$410.30	\$449.40	\$460.40	\$501.80	\$560.00
Connecticut Water Service	\$45.80	\$47.10		\$47.50	\$46.90	\$59.00			\$66.40	\$69,40	\$83.80
Middlesex Water	\$61.90 \$64.10	\$64.10		\$74.60	\$81.10	\$86.10			\$102.70	\$102.10	\$110.40
SJW Corp.	\$145.70	\$149.70		\$180.10	\$189.20	\$206.60			\$215.60	\$239.00	\$261.60
York Water Co.	\$19.60	\$19.60 \$20.90	\$22.50	\$26.80	\$28.70	\$31.40			\$39.00	\$40.60	\$41.40

	Katios of C		nange over	Frevio	us Year						
COMPANIES / YEARS	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
American States Water	1.06	1.02	1.07	1.04	1.14	1.12	1.06	1.13	1.10	1.05	1.11
American Water Works								1.04	1.11	0.98	1.08
Aqua America	1.05	1.14	1.20	1.12	1.07	1.13	1.04	1.07	1.08	0.98	1.06
Artesian Resources	1.08	1.05	1.09	1.14	1.04	1.11	1.07	1.08	1.07	1.00	1.08
California Water	1.07	1.05	1.14	1.02	1.04	1.10	1.12	1.10	1.02	1.09	1.12
Connecticut Water Service	1.01	1.03	1.03	0.98	0.99	1.26	1.04	0.97	1.12	1.05	1.21
Middlesex Water	1.04	1.04	1.11	1.05	1.09	1.06	1.06	1.00	1.13	0.99	1.08
SJW Corp.	1.07	1.03	1.11	1.08	1.05	1.09	1.07	0.98	1.00	1.11	1.09
York Water Co.	1.01	1.07	1.08	1.19	1.07	1.09	1.04	1.13	1.05	1.04	1.02

Office of Regulatory Staff

United Utility Companies, Inc. Sales/Revenues -- Historical Summary

	10-yr Averages	erages	5-yr. Averages	erages	3-Yr. Averages	'erages	
COMPANIES	Compound	Simple	Compound	Simple	Compound	Simple	
American States Water	8.36%	8.44%	9.15%	9.20%	8.95%	8.99%	
American Water Works					5.63%	5.77%	
Aqua America	8.94%	%60.6	4.69%	4.76%	4.16%	4.26%	
Artesian Resources	7.39%	7.45%	6.10%	6.15%	2.05%	5.11%	
California Water	7.84%	7.92%	8.81%	8.87%	7.61%	7.68%	
Connecticut Water Service	6.23%	6.61%	7.27%	7.57%	12.16%	12.35%	
Middlesex Water	2.96%	6.03%	5.10%	5.21%	6.58%	6.72%	
SJW Corp.	6.03%	6.12%	4.83%	4.96%	6.58%	%69.9	
York Water Co.	7.76%	7.86%	2.69%	5.75%	3.82%	3.83%	
	1	1.00 to 1.00 t	7 4 5 0 7	10747	JOCE 7	7000	ģ
Means	1.31%	1.44%	0.40%	0,000	0./3%	0.720	Feriod
Medians	7.58%	7.66%	5.89%	5.95%	6.58%	%69.9	Averages
Average of Mean & Median		7.50%		6.21%		6.70%	6.81%

Page 3 of 3 EXHIBIT DHC-4

Office of Regulatory Staff

United Utility Companies, Inc.

Sales/Revenues -- Estimates & Overall Summary

	Value Line*	Line"		
COMPANIES	S.S	S, 9/0	- Yahoo	Zacks
American States Water	550	4.18%	0.70%	9.58%
American Water Works	3800	7.20%	4.60%	5.12%
Aqua America	915	4.83%	4.20%	5.03%
Artesian Resources			2.00%	5.42%
California Water	800	9.33%	%06.9	7.37%
Connecticut Water Service	135	12.66%	4.90%	11.43%
Middlesex Water	155	8.85%	%08.9	5.26%
SJW Corp.	375	9.42%	3.20%	4.91%
York Water Co.	50	4.83%	7.20%	5.93%
		7.66%	4.83%	6.67%
		8.03%	4.90%	5.42%
		7.85%	4.87%	6.05%

^{*}numbers in the left column are actual predictions
"Yahoo"=Yahoo!Finance web site; I-year estimates

Office of Regulatory Staff

United Utility Companies, Inc. DPS -- Historical Data

Docket #2013-199-WS

				THE CALL STATE OF THE PARTY OF	2							
	89	S per sha	re									
COMPANIES VYEARS	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
American States Water	20.87	20.87	88.08	\$0.89	80.90	16.08	96.08	\$1.00	\$1.01	\$1.04	\$1.10	\$1.27
American Water Works								80.80	\$0.82	\$0.86	\$0.91	\$0.96
Aqua America	\$0.30	\$0.32	\$0.35	\$0.37	\$0.40	\$0.44	\$0.48	\$0.51	\$0.55	80.59	\$0.63	20.67
Artesian Resources	80.49	\$0.52	\$0.53	\$0.55	\$0.58	\$0.61	99.08	\$0.71	\$0.72	\$0.75	\$0.76	80.79
California Water	80.56	\$0.56	\$0.56	\$0.57	\$0.57	80.58	\$0.58	\$0.59	\$0.59	\$0.60	\$0.62	\$0.63
Connecticut Water Service	80.80	\$0.81	\$0.83	\$0.84	\$0.85	80.86	\$0.87	80.88	80.90	\$0.92	\$0.94	80.96
Middlesex Water	\$0.62	\$0.63	\$0.65	\$0.66	20.67	89.08	80.69	\$0.70	\$0.71	\$0.72	\$0.73	\$0.74
SJW Corp.	\$0.43	\$0.46	\$0.49	\$0.51	\$0.53	\$0.57	19.08	\$0.65	99.08	89.08	80.69	\$0.71
York Water Co.	\$0.34	\$0.35	\$0.37	\$0.39	\$0.42	\$0.45	\$0.48	\$0.49	\$0.51	\$0.52	\$0.53	\$0.54

Note: American Water Works began paying dividends in mid-2008, after it became publicly traded; these are pro-rated to a full year,

	<u>~</u>	Ratios of	Change	over P	ver Previous							
COMPANIES VEARS	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
American States Water		1.00	1.01	1.01	1.01	1.01	1.05	1.04	1.01	1.03	1.06	1.15
American Water Works									1.03	1.05	1.06	1.05
Aqua America		1.07	1.09	1.06	1.08	1.10	1.09	1.06	1.08	1.07	1.07	1.06
Artesian Resources		1.05	1.03	1.04	1.05	1.05	1.08	1.08	1.01	1.04	1.01	1.04
California Water		1.00	1.00	1.02	1.00	1.02	1.00	1.02	1.00	1.02	1.03	1.02
Connecticut Water Service		1.01	1.02	1.01	1.01	1.01	1.01	1.01	1.02	1.02	1.02	
Middlesex Water		1.02	1.03	1.02	1.02	1.01	1.01	1.01	1.01	1.01	1.01	1.01
SJW Corp.		1.07	1.07	1.04	1.04	1.08	1.07	1.07	1.02	1.03	1.01	1.03
York Water Co.		1.03	1.06	1.05	1.08	1.07	1.07	1.02	1.04	1.02	1.02	

Office of Regulatory Staff

United Utility Companies, Inc.

DPS -- Historical Data Summary

	10-yr Averages	erages/	5-yr. Averages	erages	5-Yr. Av	erages	
COMPANIES	Compound	Simple	Compound	Simple	Compound Simple	Simple	
American States Water	3.86%	3.94%	5.76%	5.87%	7.93%	8.06%	
American Water Works					5.39%	5.40%	
Aqua America	7.67%	7.68%	%06.9	%06.9	%08'9	%08.9	
Artesian Resources	4.38%	4.40%	3.71%	3.74%	3.23%	3.24%	
California Water	1.18%	1.19%	1.67%	1.67%	2.21%	2.21%	
Connecticut Water Service	1.67%	1.67%	1.95%	1.95%	2.20%	2.20%	
Middlesex Water	1.62%	1.62%	1.41%	1.41%	1.39%	1.39%	
SJW Corp.	4.44%	4.46%	3.08%	3.10%	2.46%	2.47%	
York Water Co.	4.72%	4.74%	2.51%	2.51%	1.94%	1.94%	
Means	3.69%	3.71%	3.37%	3.39%	3.73%	3.75%	Period
Medians	4.12%	4.17%	2.80%	2.81%	2.46%	2.47%	Averages
Average of Mean & Median		3.92%		3.09%		3.10%	3.37%

EXHIBIT DHC-5 Page 3 of 3

Office of Regulatory Staff United Utility Companies, Inc. DPS -- Estimates & Summary Docket #2013-199-WS

COMPANIES	DPS Projection*	Compound %
American States Water	1.80	9.11%
American Water Works	1.40	%68'6
Aqua America	1.00	10.53%
Artesian Resources		
California Water	06:0	9.33%
Connecticut Water Service	1.14	4.34%
Middlesex Water	0.80	1.97%
SJW Corp.	0.90	6.11%
York Water Co.	0.65	4.99%
	Mean	7.03%
	Median	7.61%
Average of N	Average of Mean & Median	7.32%

Average of Historical & Projected DPS Growth

5.35%

*Source: Exhibit DHC-9

Office of Regulatory Staff United Utility Companies, Inc. DCF Summary Docket #2013-199-WS

Source	Exhibit DHC-2	Exhibit DHC-3	Exhibit DHC4	Exhibit DHC-5	Calculated average/mean	Exhibits DHC-1, p.3 of 5, DHC-7, DHC-9	Calculated, multiplication of above two lines	DCF Recommendation
Average	6.71%	4.80%	6.53%	5.35%	5.85%	3.55%	0.21%	%09.6
Projected	6.23%	4.71%	6.25%	7.32%				
Historical	7.20%	4.89%	6.81%	3.37%				
Indicator	EPS	BVPS	Sales/Rev.	DPS				

Exhibit DHC-7 page 1 of 1

Office of Regulatory Staff United Utility Companies, Inc. DCF Proxy Group Characteristics Docket #2013-199-WS

Bond	Rating								A 3		
	B								0.85		0.68
	Cap'n ²										
Dividend	Yield1	2.80%	2.90%	2.60%	3.70%	3.40%	3.20%	3.90%	3.00%	3.00%	3.17%
	Company	American States Water	American Water Works	Aqua America	Artesian Resources	California Water	Connecticut Water Service	Middlesex Water	SJW Corp.	York Water Co.	

Sources:

All columns except Credit Rating: Exhibit DHC-9

Bond Rating column from S&P online

Footnotes:

¹Average Water Company Dividend Yield before reduction in capital gains = (3.5%+3.6%)/2; see Exhibit DHC-9, p. 10 of 10

²"Cap'n" = "Capitalization"; numbers are in \$1,000,000's

³ Ratings of Aqua Pennsylvania & San Jose Water Companies, respectively

Exhibit DHC-8 page 1 of 1

Office of Regulatory Staff United Utility Companies, Inc. CAP-M Calculation Docket #2013-199-WS

30-Yr. Treasury Bond Rate		3.15	3.60	3.70	3.80	3.90	4.00	4.10			
Ouarter in Blue Chip Forecast		2Q 2013	3Q 2013	4Q 2013	1Q 2014	2Q 2014	3Q 2014	4Q 2014			
Compound Annual Growth Rate (%)	9.1	10.4	10.8	10.8	11.3	11.3	11.3	11.5	11.5	13.0	11.1
Deciles of Company Size	Largest:1	2	3	4	5	9	7	80	6	Smallest: 10	Average

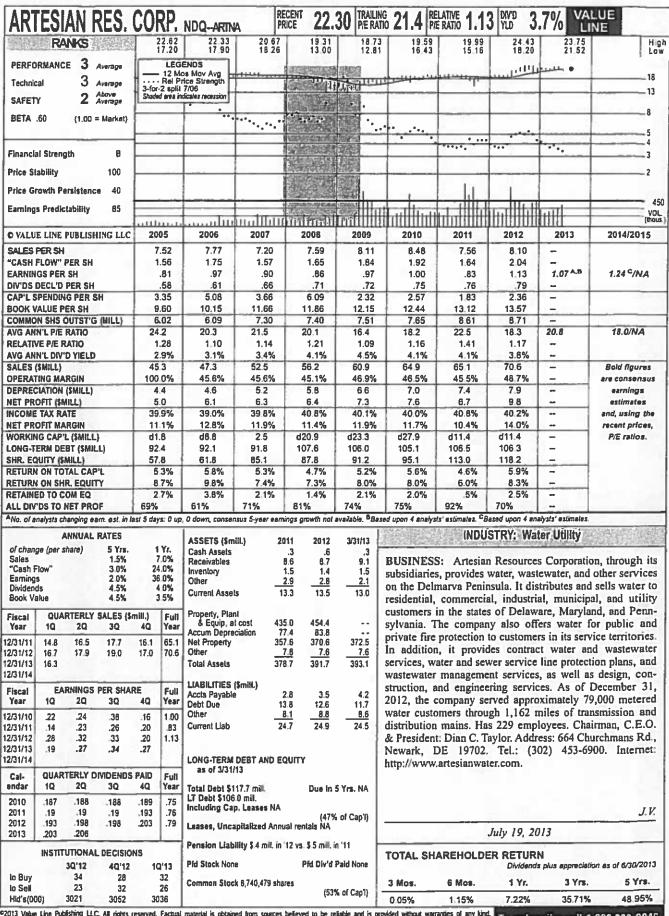
 $K = R_f + ((R_m.R_f) * \beta)$ K = 4.1 + ((11.1-4.1)*.68)K = 8.86

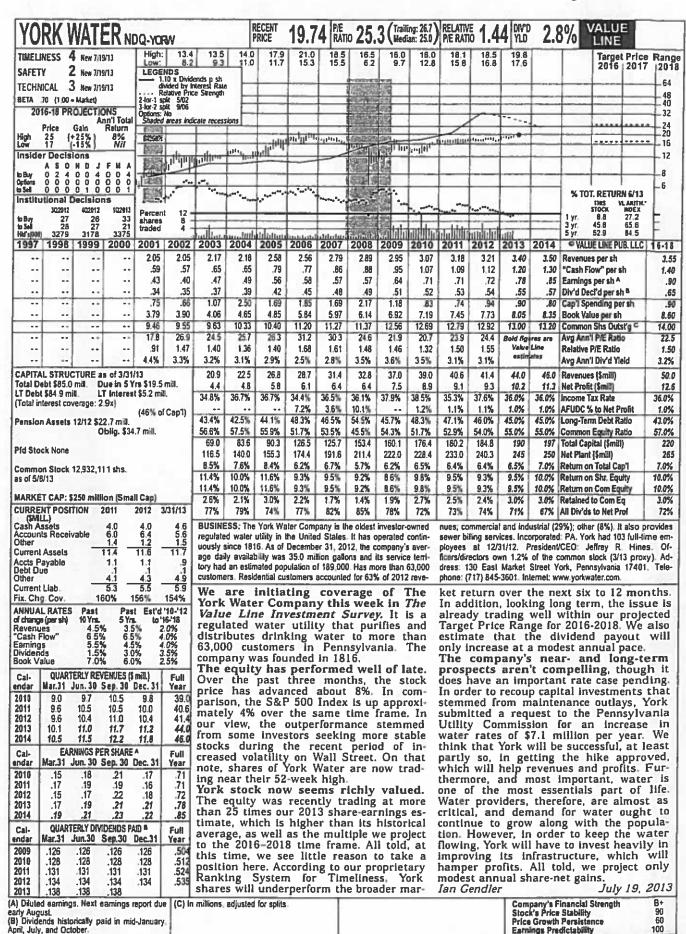
Sources:

Long-Term stock returns Stocks, Bonds, Bills & Inflation, 2013 Yearbook, p.96

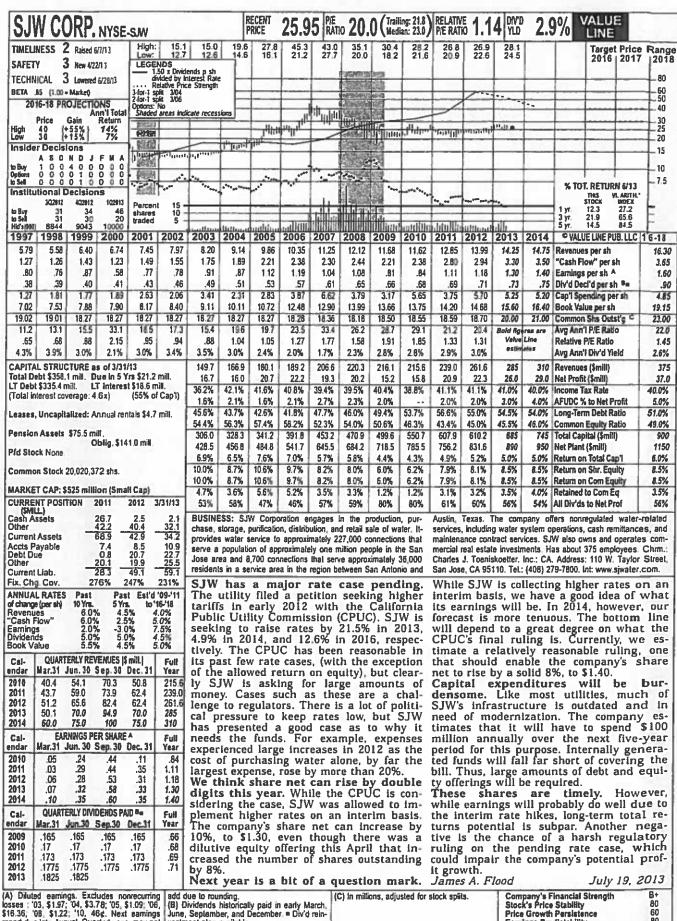
30-Year Treasury Bond projected interest rate: Blue Chip Financial Forecasts, August 1, 2013, p.2

β is from Exhibit DHC-7



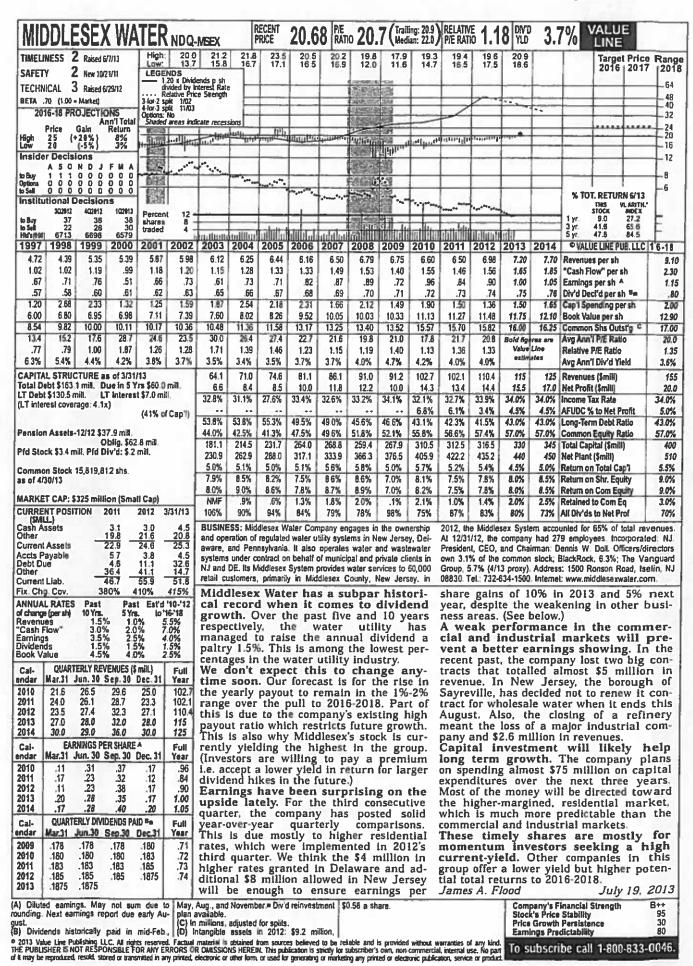


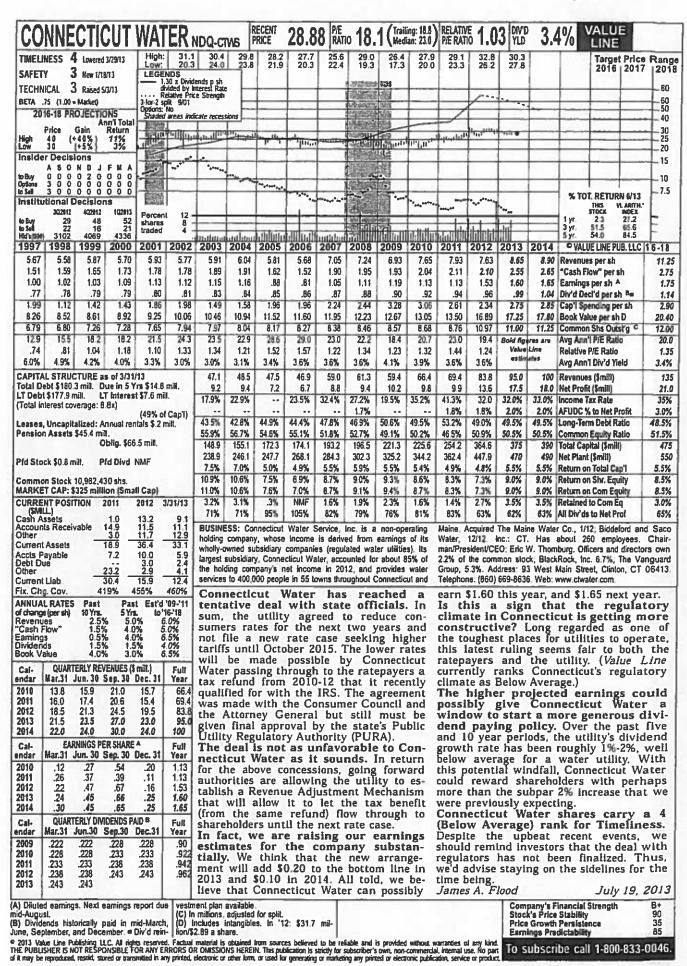
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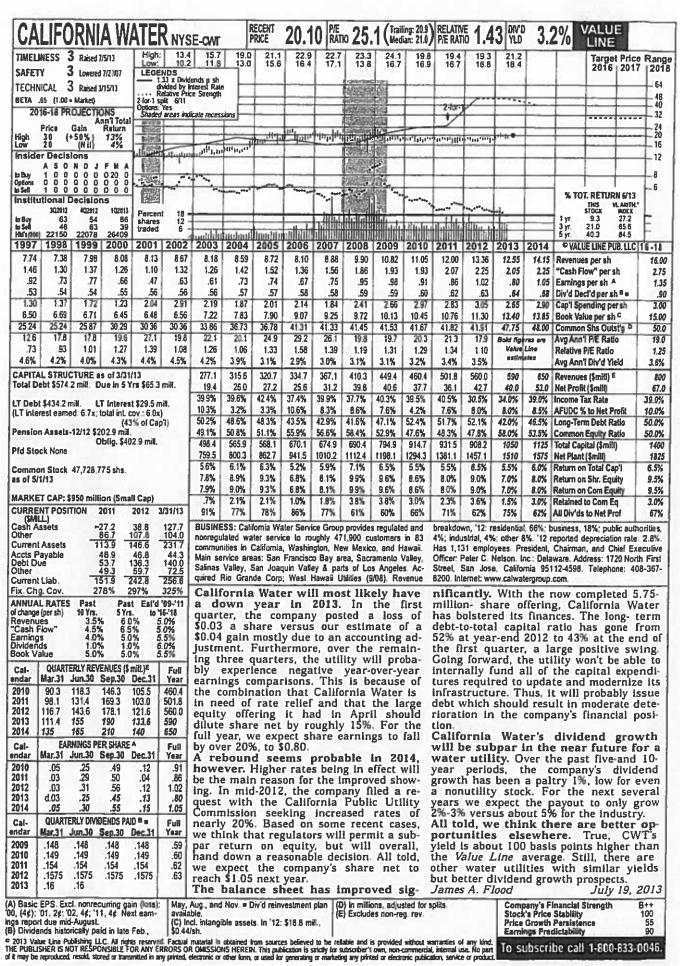


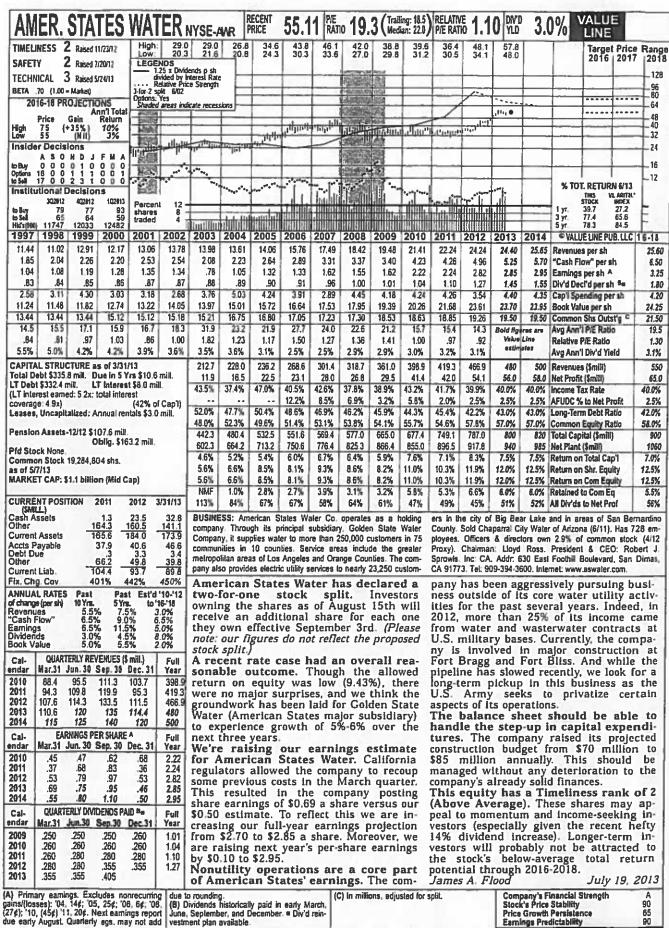
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Price Growth Persistence 60 Earnings Predictability To subscribe call 1-800-833-0046.





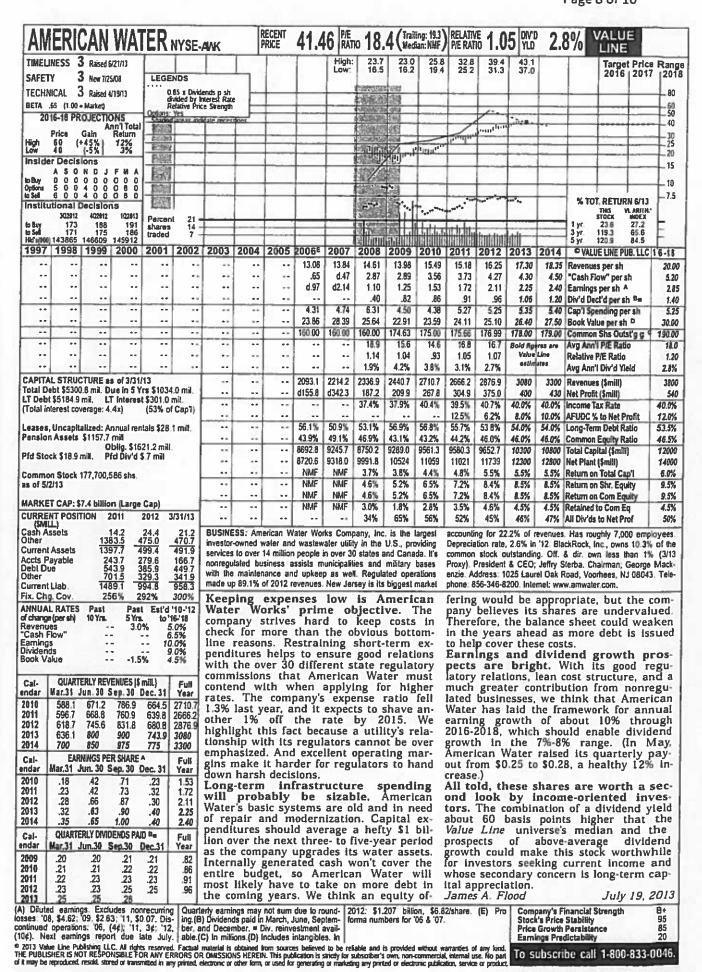


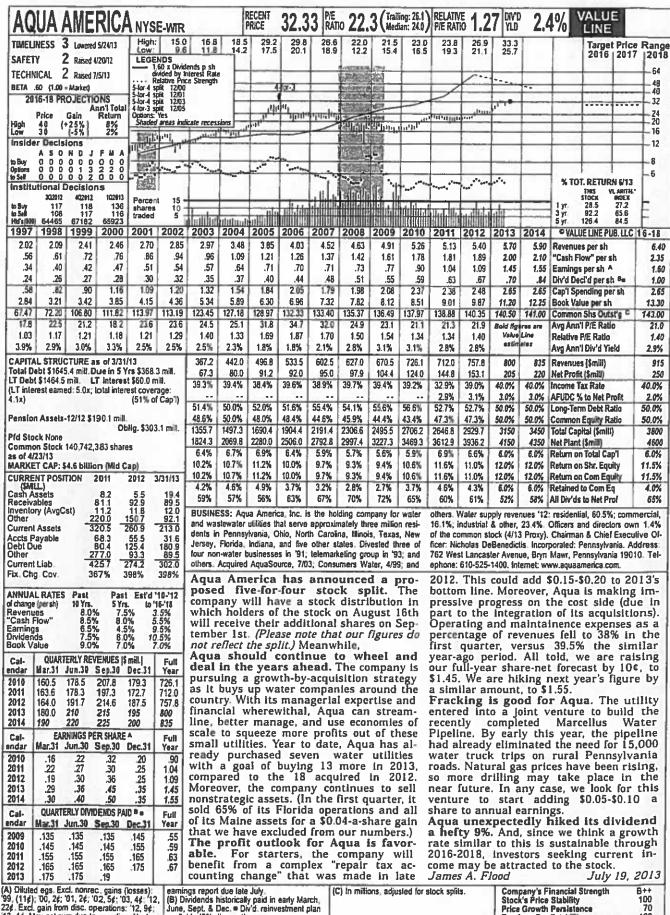


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Price Growth Persistence 70 Earnings Predictability

January 30, 2004

WATER UTILITY INDUSTRY

1421

The Water Utility Industry came under significant pressure in 2003. The majority of the companies covered in the next few pages experienced earnings declines last year, as unfavorable weather conditions resulted in weak demand for water throughout the United States.

Infrastructure costs are expected to continue to rise. As a result, further consolidation appears to be inevitable. Water utility stocks are ranked to lag the market over the next 12 months. However, conservative investors may find the risk-adjusted, total-return potential of these issues attractive.

Dampened Results

Most of the Water companies in our Survey were hampered by unfavorable weather conditions in 2003. American States Water Co. and California Water Service Group both most likely suffered year-over-year earnings declines because of the cool, wet-weather conditions. Aqua America, formerly Philadelphia Suburban Corp., however, was probably able to eke out a modest gain last year, despite the sluggish demand. (Investors should note that full-year results for each of the companies covered in this industry were not available as of the date of this issue's publication.) Although weather conditions are nearly impossible to predict, we expect more normal weather to help the Water Utility Industry rebound in 2004.

Increasingly Strict Regulations

In order to stay in compliance with the plethora of state and local regulations put in place to ensure the health levels of drinking water, the Water Utility Industry continues to face stricter purification standards. Amended in 1996, the Safe Drinking Water Act (SDWA) of 1974 authorizes the Environmental Protection Agency (EPA) to work with state and local governments to periodically test for impurities in drinking water and to regulate the levels of contaminants that are acceptable per a specified amount of water. These standards take into account the health effects of chemicals, measurement capabilities, and technical feasibility. One of the most significant contaminants that the industry screens for is arsenic, a naturally occurring substance. These laws and regulations are likely to continue to grow more stringent as the threat of bioterrorism against our water pipelines has already prompted officials to tighten regu-

lation requirements.

Rising Infrastructure Costs

Water companies are also feeling the pressure to maintain and even to upgrade aging facilities. Indeed, many water/wastewater systems that are presently in use were built over 100 years ago and are outdated. The costs associated with replacing these systems continue to grow and, according to the EPA, are expected to venture into the hundreds of billions of dollars over the next 20 years. Given the astronomical expenses, it appears that long-term relief from the federal government is needed. Nevertheless, for now, state and local funding woes will probably leave the water companies to cover most of the expenses.

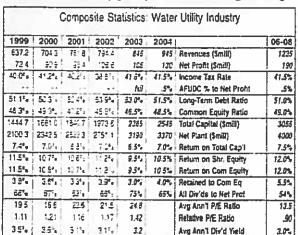
Rapid Consolidation

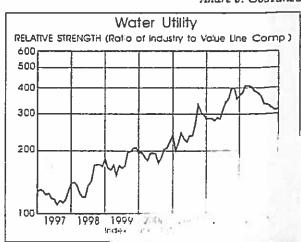
The rising costs associated with water purification and facility upgrades are straining many of the smaller companies in the water industry that do not have sufficient cash flow and liquidity to foot the bill for the costly improvements. Therefore, the industry has seen massive consolidation in recent years, as the smaller operations have been forced to sell to larger suitors with significantly greater capital resources. The larger utilities are benefiting from economies of scale, as well as enhanced geographic diversity. In turn, the companies are becoming less susceptible to state or region-specific problems and/or state requirements. Aqua America, which has been acquisition-friendly over the past few years, is on the cusp of buying Heater Utilities, which would likely increase its customer base fivefold in North Carolina.

Investment Advice

Growth-minded investors ought to look elsewhere. The water company stocks in this review are not timely and offer little capital-gains appeal out to 2006-2008. However, attractive dividend yields may appeal to income-minded individuals. As always is the case, though, potential investors are advised to carefully review individual reports before making any new commitments to these issues

Andre J. Costanza





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EXHIBIT DHC-10 PAGE I 0F I

OFFICE OF REGULATORY STAFF UNITED UTILITY COMPANIES, INC. Docket #2013-199-WS

Consumer Price Index - Urban Consumers

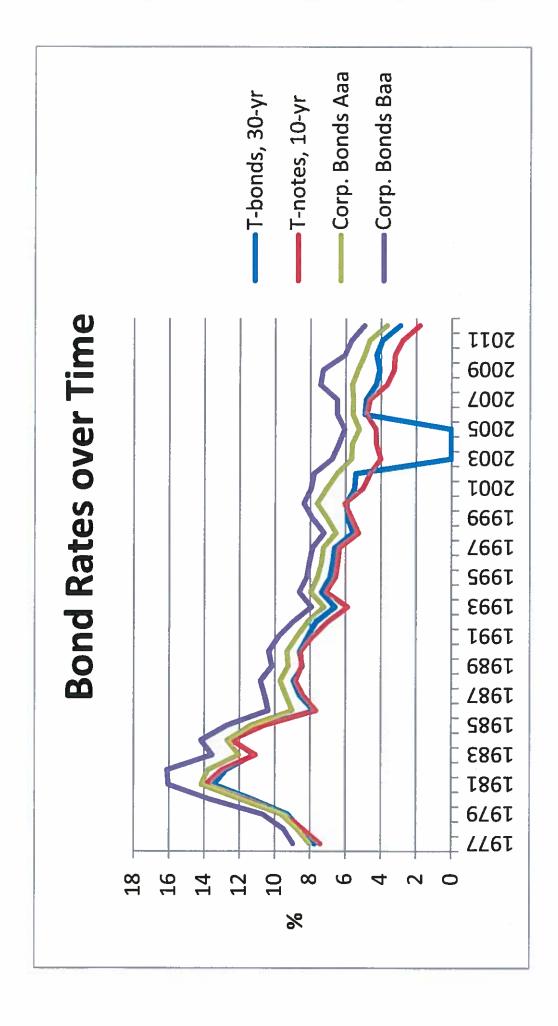
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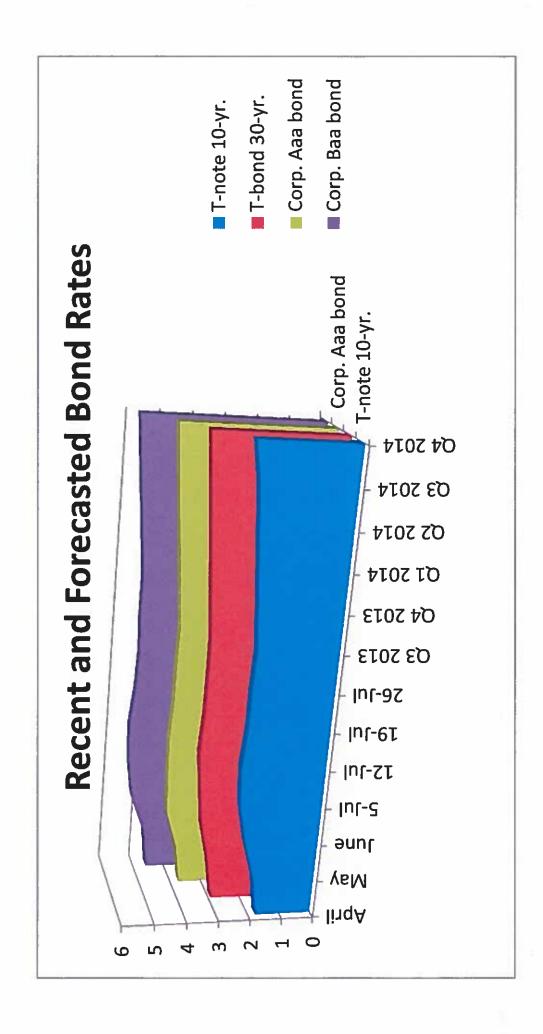
	Annual Annual % ∆		2.95%	2.29%	1.56%	2.21%	3.36%	2.85%	1.58%	2.28%	2.66%	3.39%	3.23%	2.85%	3.84%	-0.36%	1.64%	3.16%	2.07%		
	Annual 1	152.4	156.9	160.5	163.0	166.6	172.2	177.1	179.9	184.0	188.9	195.3	201.6	207.3	215.3	214.5	218.1	224.9	229.6		
	Dec	153.5	158.6	161.3	163.9	168.3	174.0	176.7	180.9	184.3	190.3	196.8	201.8	210.0	210.2	215.9	219.2	225.7	229.6		
	Nov	153.6	158.6	161.5	164.0	168.3	174.1	177.4	181.3	184.5	191.0	197.6	201.5	208.9	212.4	216.3	218.8	2797	230.2		ar
	Oct	153.7	158.3	161.6	164.0	168.2	174.0	177.7	181.3	185.0	190.9	199.2	201.8	210.2	216.6	216.2	218.7	226.4	231.3		1.96% Month over Same Month Last Year
	Sep	153.2	157.8	161.2	163.6	167.9	173.7	178.3	181.0	185.2	189.9	198.8	202.9	208.5	218.8	216.0	218.4	226.9	231.4		er Same Mo
	Aug	152.9	157.3	160.8	163.4	167.1	172.8	177.5	180.7	184.6	189.5	196.4	203.9	207.9	219.1	215.8	218.3	226.5	230.4		Month ove
	Jul	152.5	157.0	160.5	163.2	166.7	172.8	177.5	180.1	183.9	189.4	195.4	203.5	208.3	220.0	215.4	218.0	225.9	229.1	233.6	
100 000	Jun	152.5	156.7	160.3	163.0	166.2	172.4	178.0	179.9	183.7	189.7	194.5	202.9	208.4	218.8	215.7	218.0	225.7	229.5	233.5	1.75%
	Мау	152.2	156.6	1	162.8	166.2	171.5	177.7	179.8	183.5	189.1	194.4	202.5	7	216.6	213.9	218.2	226.0	229.8	232.9	1.36%
	Apr	151.9	156.3	160.2	162.5	166.2	171.3	176.9	179.8	183.8	188.0	194.6	201.5	206.7	214.8	213.2	218.0	224.9	230.1	232.5	1.06%
	Mar	151.4	155.7	160.0	162.2	165.0	171.2	176.2	178.8	184.2	187.4	ا 193.3	199.8	205.4	213.5	212.7	217.6	223.5	229.4	232.8	1.47%
OOT	Feb	150.9	154.9	159.6	161.9	164.5	169.8	175.8	. 177.8	183.1	186.2	191.8	198.7	203.5	211.7	212.2	216.7	221.3	7.722	1 232.2	1.98%
1982-84=100	Jan	150.3	154.4	159.1	161.6	164.3	168.8	175.1	177.1	181.7	185.2	190.7	198.3	202.4	211.1	211.1	216.7	220.2	226.7	230.3	1.59%
CLI-D	Year	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2002	2006	2007	2008	2009	2010	2011	2012	2013	

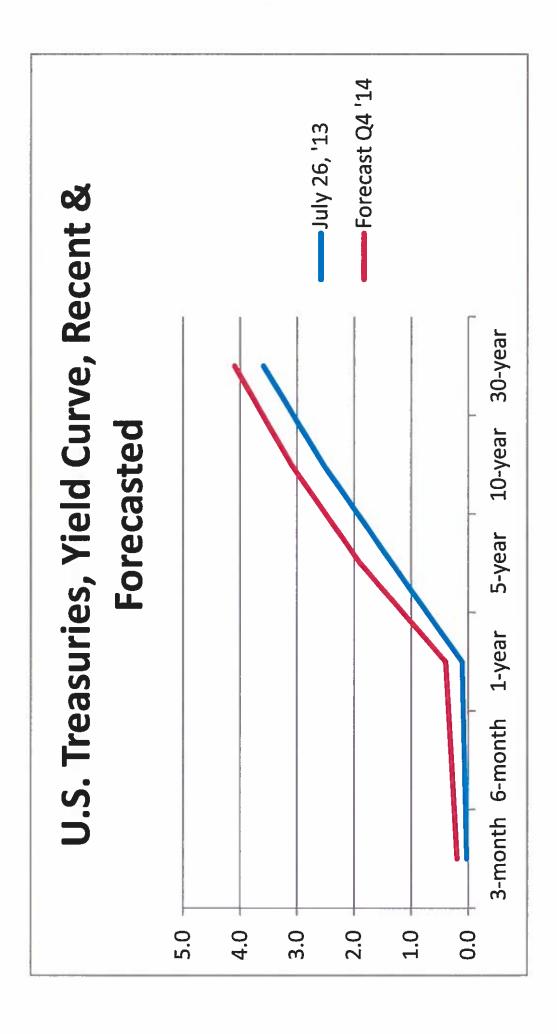
Source: U.S. Dept. of Labor, Bureau of Labor Statistics; except last line and last column are calculated

Source: St Louis Federal Reserve

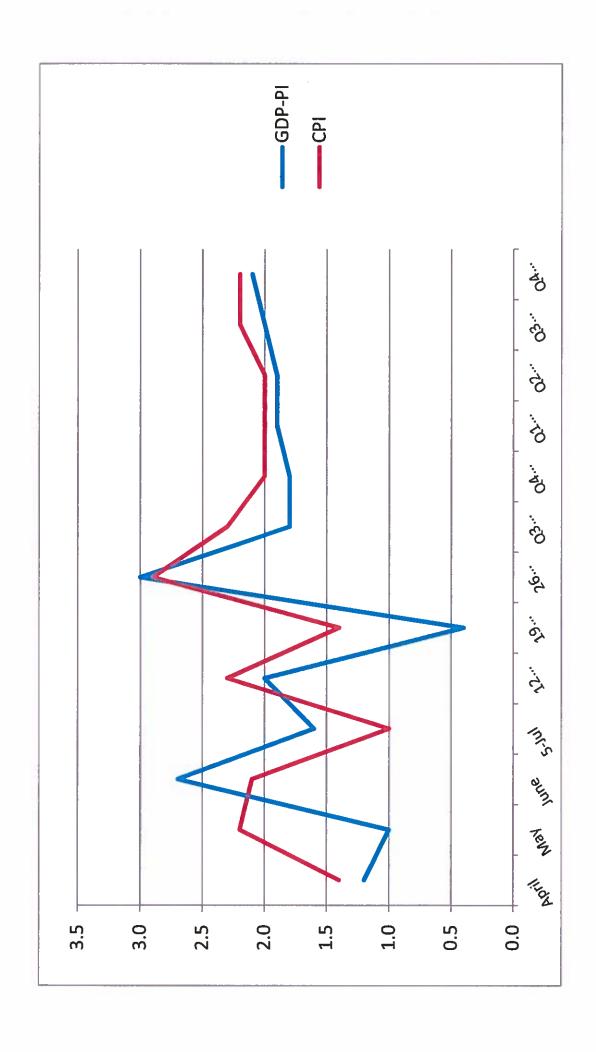
United Utility Companies, Inc. Office of Regulatory Staff Docket # 2013-199-WS







Office of Regulatory Staff United Utility Companies, Inc. Docket # 2013-199-WS



S.C. Office of Reglatory Staff CEM ANALYSIS Docket #2013-199-WS

i		Book Value Growth 10-	Proj Book Value Growth	EPS Growth	Total Return	Total Return	Total Return
Beta	Beta 10-Year	Year	Rate	10-Year	2004	2008	2012
0.85	0.84	-25.00	85.50	33.50	51.66	-25.15	9.62
0.80	0.56	0:20	25.50	14.00	-16.25	-27.90	39.51
0.80	0.71	14.50	22.00	18.50	9.79	17.63	14.61
0.75	99.0	11.00	22.00		48.15	-3.53	31.11
0.65	0.68	5.50	21.50	10.00	30.70	5.58	74.49
0.70	0.72	12.50	21.00	29.00	1.24	11.39	-69.57
0.75	0.73	12.50	20.50	22.00	17.26	-24.57	23.85
0.70	0.74	-10.50	20.50	4.00	0.24	-30.51	47.41
0.70	0.54	40.50	20.00	54.00			
0.85	0.74	3.50	20.00	12.00	7.19	-20.76	5.94
0.85	0.86	15.50	19.50	20.50	25.15	-32.82	4.63
0.70	0.48	16.00	18.50	11.00	10.01	-20.21	15.35
0.70	0.64	6.00	18.50	14.00	3.75	-22.25	4.28
0.85	0.92	17.50	17.50	22.50			
0.70	0.68	7.00	17.50	10.50	60.9	-11.29	19.27
0.80	0.77	12.00	17.00	27.00	49.86	-21.15	34.89
0.80	0.67	10.00	16.00		-35.25	25.91	56.81
0.80	0.65	16.50	15.50	12.50	29.72	-30.51	25.96
0.85	0.63	16.00	15.50	25.00	-45.10	-10.82	4.25
0.80	0.59	14.00	15.50	14.00	14.77	-27.42	32.96
0.85	0.90	10.00	15.50	16.50	58.55	-36.10	23.2
0.70	0.55	43.00	15.00	14.50	44.83	-6.69	8.72
0.70	0.52	11.50	15.00	26.00	37.17	19.48	27.54
0.70	0.53	10.00	14.50	16.00	26.75	32.72	-8.76
0.85	0.94	4.00	14.50	11.00			
0.85	0.89	11.50	14.00	10.50	-1.75	-29.80	16.67
0.80	0.88	8.50	14.00	8.50	24.85	-36.67	29.72
0.80	0.63	8.50	14.00	7.50	3.18	-18.81	45.78
0.80	0.88	6.00	14.00	-0.50	49.72	18.68	23.59
0.70	0.54	32.50	13.50		20.08	11.15	79.45
0.75	0.52	12.50	13.50	10.00	17.89	25.27	1.92
0.60	0.51	00.9	13.50	3.50	-5.24	0.13	9.71

S.C. Office of Reglatory Staff CEM ANALYSIS Docket #2013-199-WS

Company Tick DaVita Inc. DaVA Sanderson Farms SAFM Alliant Techsystems ATK ResMed Inc. CACI Int'I CACI Int'I CACI Rollins, Inc. Laboratory Corp. Lywyriad Genetics CHE Carriage Services CSV Henry (Jack) & Assoc. DSI Systems AAN O'Reilly Automotive ORLY	Ticker VA AFM AFM MD ACI	Beta Bet 0.65	10 000			10-Year	8000	2008	2012
so soc.	~ .	0.65	perd 10-rear	Year	Kate)	5007		7107
SOC.	5 -	000	0.54	26.50	13.00	22.00	52.04	-12.03	45.8
ıi		0.0	0.54	14.00	13.00	0.50	62.56	3.79	-3.7
ıi	_	0.80	0.86	13.00	13.00	12.50	13.19	-24.61	10.15
ú		0.80	99.0	26.50	12.50	20.50	23.01	-28.65	65.1
43		0.85	0.88	17.50	12.50	17.00	40.13	0.72	-1.59
ıi		0.85	0.54	15.00	12.50	19.50	17.90	-4.42	1.15
ú		0.70	0.61	12.50	12.50	16.50	34.83	-14.72	0.76
ü	z	0.75	0.60	10.50	12.50		75.04	42.74	30.13
ü		0.80	0.51	8.00	12.50	18.50	46.84	-28.42	35.44
ப்		0.75	0.93	3.00	12.50	64.50	33.51	-77.16	114.66
		0.85	0.75	13.00	12.00	11.00			
		0.85	0.99	9.00	12.00	19.50	18.22	-47.68	31.28
		0.85	0.80	14.50	11.50	18.50	83.92	27.57	6.23
		0.70	0.49	14.50	11.50	20.00	16.83	-5.21	11.85
Exxon Mobil Corp. XOM	_	0.75	0.59	12.00	11.50	14.00	28.04	-13.14	4.72
PRGO	0	0.70	0.59	12.00	11.50	22.50	10.77	-7.16	7.25
Total System Svcs.		0.85	0.95	10.50	11.50	8.00			
Universal Corp. UVV		0.80	0.98	8.00	11.50	1.00	11.91	-39.48	13.14
Heartland Express HTLI	•	08.0	99.0	4.50	11.50	6.50			
Amer. Tower 'A' AM1		0.80	0.64	4.00	11.50		70.06	-31.17	30.43
Vertex Pharmac.	V	0.85	09.0	-5.00	11.50		2.13	30.78	26.17
United Natural Foods UNF		0.75	0.79	17.00	11.00	17.50	73.21	-43.82	33.94
Medtronic, Inc. MD1		0.85	0.80	12.50	11.00	12.00			
ACT		0.70	0.48	6.00	11.00	12.50	-28.67	-2.10	42.53
CELG		0.80	0.59	29.50	10.50		18.18	19.63	16.08
McKesson Corp. MCK		0.75	0.74	8.50	10.50	14.50	-1.41	-40.37	25.59
RLI		0.80	0.47	8.00	10.50	12.00	12.44	9.62	-2.68
Lockheed Martin		0.85	0.87	-11.00	10.50	16.50	9.97	-18.58	19.5
Comtech Telecom. CMTL		0.70	0.64	20.50	10.00	24.00	30.64	-15.16	-6.91
Schein (Henry) HSIC		0.80	0.74	13.00	10.00	14.00	3.05	-40.24	24.82
Johnson & Johnson		0.65	0.53	11.50	10.00	10.00	25.14	-7.77	10.83
SNPS		0.80	0.81	10.50	10.00	6.50	-42.26	-28.58	17.06

S.C. Office of Reglatory Staff CEM ANALYSIS Docket #2013-199-WS

				Book Value Growth 10-	Proj Book Value Growth	EPS Growth	Total Return	Total Return	Total Return
Сотрапу	Ticker	Beta B	Beta 10-Year	Year	Rate	10-Year	2004	2008	2012
Sysco Corp.	SYY	0.70	0.74	9.50	10.00	8.50			
Baxter Int'l Inc.	BAX	0.70	0.54	8.50	10.00	9.50	15.22	-6.24	38.42
ConAgra Foods	CAG	0.65	0.69	4.50	10.00	2.00	16.06	-28.06	14.94
Amgen	AMIGN	0.65	0.53	12.50	9.50	16.50			
Becton, Dickinson	BDX	0.65	0.68	10.00	9.50	12.50	39.74	-16.92	7.23
Aon plc	AON	0.70	0.70	7.00	9.50	5.50	2.17	-2.87	20.29
IAC/InterActiveCorp	IACI	0.75	0.77	-7.00	9.50		-18.60	-35.92	12.6
Knight Transportation	KNX	0.85	0.71	12.00	9.00	11.00	45.15	9.82	-1.75
Owens & Minor	OMI	0.75	0.47	12.00	9.00	10.00			
Harris Teeter Super.	HTSI	0.65	0.78	7.00	9.00	7.00	23.66	-19.07	-7.03
Genuine Parts	GPC	0.80	0.75	3.50	9.00	5.50	36.90	-15.05	7.24
Stryker Corp.	SYK	0.80	0.97	21.50	8.50	17.50			
Quest Diagnostics	DGX	0.75	0.57	13.00	8.50	15.50	31.42	-1.07	1.5
Landauer, Inc.	LDR	0.85	0.79	9.50	8.50	5.00	16.22	46.35	23.7
BMC Software	BMC	0.85	0.75	2.00	8.50	38.50			
Cubist Pharm.	CBST	0.80	0.73	19.00	8.00		-3.03	17.80	6.13
CVS Caremark Corp.	CVS	0.85	0.83	18.00	8.00	13.50	25.66	-27.16	20.3
Berkley (W.R.)	WRB	0.70	0.46	17.00	8.00	29.50	35.85	4.91	10.76
DeVry Inc.	DV	0.70	0.60	16.50	8.00	17.00	-30.95	10.76	-37.55
NIKE, Inc. 'B'	NKE	0.80	0.83	12.50	8.00	14.50			
Waste Connections	WCN	0.70	0.53	12.00	8.00	12.00	36.02	2.17	3.16
J&J Snack Foods	JISF	0.70	0.76	10.50	8.00	13.50	30.19	16.20	21.06
Automatic Data Proc.	ADP	0.80	0.67	4.50	8.00	5.50	13.46	-9.05	8.52
Raytheon Co.	RTN	0.75	0.72	-1.00	8.00	12.00	32.20	-14.22	23.35
Walgreen Co.	WAG	0.80	0.97	13.00	7.50	11.00	7.29	-34.38	15.31
Navigant Consulting	NCI	0.85	0.76	12.50	7.50	14.00	41.04	16.09	-2.19
WD-40 Co.	WDFC	0.70	0.67	11.50	7.50	2.00	-16.91	-23.07	19.63
West Pharmac. Svcs.	WST	0.80	0.83	10.00	7.50	10.00	50.91	-5.71	46.63
Lilly (Eli)	LLY	0.80	0.70	6.50	7.50	4.50	-17.57	-21.23	24.27
Spartan Stores	SPTN	0.70	0.56	1.00	7.50	1.00	32.80	2.64	-15.38
Shenandoah Telecom.	SHEN	0.85	0.80	10.00	7.00	12.50	18.69	18.53	49.68
AmerisourceBergen	ABC	0.70	0.67	7.50	7.00	15.00	4.72	-19.81	17.95

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				Book Value	Proj Book	EPS	Total	Total	Total	
				Growth 10-	Value Growth	Growth	Return	Return	Return	
Company	Ticker	Beta	Beta 10-Year	Year	Rate	10-Year	2004	2008	2012	
Cardinal Health	CAH	0.80	0.78	6.50	7.00	3.50				
Healthcare Svcs.	HCSG	0.75	0.58	6.50	7.00	16.50	65.23	-22.13	35.33	
Haverty Furniture	HVT	0.85	0.77	2.50	7.00	-11.00	-5.61	5.83	59.12	
Costco Wholesale	COST	0.70	0.70	9.50	6.50	9.50	31.15	-23.98	19.92	
Village Super Market	VLGEA	0.75	0.54	8.50	6.50	8.50	23.37	21.82	23.41	
Marsh & McLennan	MMC	0.80	0.77	2.50	6.50	-2.50	-29.80	-5.54	12.04	
Wiley (John) & Sons	JW/A	0.85	0.78	14.00	9.00	11.00	35.04	-15.86	-10.53	
ManTech Int'l 'A'	MANT	0.85	0.53	14.00	9.00	14.00	-4.85	23.67	-14.18	
Markel Corp.	MKL	0.80	0.61	12.50	9.00		43.58	-39.12	4.52	
Smucker (J.M.)	SJM	0.70	0.57	12.50	6.00	12.00	6.11	-5.03	13.14	
Coca-Cola	ΚO	0.60	0.54	12.50	9.00	9.00	-16.12	-24.11	6.51	
Greatbatch, Inc.	GB	0.75	0.85	8.50	6.00	13.00	-46.96	32.37	5.16	
MAXIMUS Inc.	MMS	0.80	0.81	6.50	9.00	10.00	-20.47	-7.99	53.99	
Bristol-Myers Squibb	BMY	0.70	0.56	9.00	6.00	-1.50	-7.27	-6.05	-3.78	
Weis Markets	WMK	0.65	0.68	3.00	6.00	4.00	13.17	-12.88	0.83	
FTI Consulting	FCN	0.75	0.56	19.00	5.50	13.50				
Biogen Idec Inc.	8118	0.75	0.86	15.50	5.50	24.00				
Chubb Corp.	CB	0.80	0.52	11.00	5.50	19.00	15.43	4.09	11.28	
Teleflex Inc.	TFX	0.80	0.90	9.50	5.50	2.50	9.45	-18.56	18.91	
Forrester Research	FORR	0.75	0.87	3.50	5.50	4.50	1.07	0.68	-19.95	
ICU Medical	ICOI	0.70	0.55	11.00	5.00	10.00	-20.27	-7.97	35.4	
Pfizer, Inc.	PFE	0.75	0.71	14.50	4.50	-1.50	-22.31	-16.85	20.41	
Techne Corp.	TECH	0.70	0.70	14.00	4.50	14.50				
Bemis Co.	BMS	0.85	0.72	7.00	4.50	4.00				
McDonald's Corp.	MCD	0.60	0.49	6.50	4.50	14.00	31.48	8.55	-9.27	
Endo Health Solns.	ENDP	0.75	69.0	17.00	4.00		8.52	-2.96	-24.04	
Forest Labs.	FRX	0.80	0.74	15.50	4.00	10.00				
Snyder's-Lance	LNCE	0.65	0.70	7.50	4.00	2.00	31.99	16.21	10.15	
Tootsie Roll Ind.	TR	0.70	69.0	4.50	4.00	-1.50	-0.08	-2.60	16.4	
Analogic Corp.	ALOG	0.85	0.78	4.00	4.00	2.00	9.73	-59.37	30.38	
Procter & Gamble	PG	0.60	0.50	18.50	3.50	9.00	12.38	-13.77	5.18	
Waste Management	WM	0.80	0.61	4.50	3.00	5.50	3.83	4.79	7.64	

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											Overall Averages	10.174				9.713		9.943			9.262
Total Return	2012 -0.5	-24.89	-10.35		13.22	12.95			-10.75	16.166	13.22										
Total Return	-49.91	29.69	-17.26		-29.58	45.70			-29.66	-8.914	-10.82										
Total Return	25.21	72.83	-6.24		9.57	4.97			-9.90	17.033	16.06			sults				ratified			
EPS Growth	4.50	4.50	-1.00	2.00	1.00			2.00	-3.00	12.234	12			10.0741 Stratified results				3.4815 Weighted stratified	results		
Proj Book Value Growth	2.50	2.50	2.00	1.50	1.50	0.50	4.00	-5.00	-39.00	10.164	9.5	9.832	6.2667	10.0741	10.5909	8.9772	-	3.4815	3.3580	1.1/68	8.0163
Book Value Growth 10-	7.00	5.50	-2.00	9.50	6.50	43.50	33.00	2.00	2.00	10.533	10.5	10.516	9.8333	11.9444	9.5662	10.4480		5.4630	3.9815	1.0023	10.5074
Rota 10. Vosa		0.70	0.72	0.67	0.69	0.89	0.93	0.73	0.80	0.698	0.7		"<.70	">.69 & <.80	>=.80			<.70	>.69 & <.80	 08	
2 2	L/S	0.70	0.80	0.80	0.70	0.75	0.85	0.80	0.65	0.761	0.75		=	=	^			0.56 "<.70	0.33 ">.69	V.11.0	
T.	WPO	NAFC	WWE	MRK	占	PETS	NTRI	HRB	SWY	mean	median	137 companies					_	<u> </u>	m r	-	
Medmo	Washington Post	Nash Finch Co.	World Wrestling Ent.	Merck & Co.	CenturyLink Inc.	PetMed Express	NutriSystem Inc.	Block (H&R)	Safeway Inc.									C OFFICE PHOTO	שבי באווטוג טחכ-/		

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Overall CEM Results

FEDERAL RESERVE press release



Release Date: July 31, 2013

For immediate release

Information received since the Federal Open Market Committee met in June suggests that economic activity expanded at a modest pace during the first half of the year. Labor market conditions have shown further improvement in recent months, on balance, but the unemployment rate remains elevated. Household spending and business fixed investment advanced, and the housing sector has been strengthening, but mortgage rates have risen somewhat and fiscal policy is restraining economic growth. Partly reflecting transitory influences, inflation has been running below the Committee's longer-run objective, but longer-term inflation expectations have remained stable.

Consistent with its statutory mandate, the Committee seeks to foster maximum employment and price stability. The Committee expects that, with appropriate policy accommodation, economic growth will pick up from its recent pace and the unemployment rate will gradually decline toward levels the Committee judges consistent with its dual mandate. The Committee sees the downside risks to the outlook for the economy and the labor market as having diminished since the fall. The Committee recognizes that inflation persistently below its 2 percent objective could pose risks to economic performance, but it anticipates that inflation will move back toward its objective over the medium term.

To support a stronger economic recovery and to help ensure that inflation, over time, is at the rate most consistent with its dual mandate, the Committee decided to continue purchasing additional agency mortgage-backed securities at a pace of \$40 billion per month and longer-term Treasury securities at a pace of \$45 billion per month. The Committee is maintaining its existing policy of reinvesting principal payments from its holdings of agency debt and agency mortgage-backed securities in agency mortgage-backed securities and of rolling over maturing Treasury securities at auction. Taken together, these actions should maintain downward pressure on longer-term interest rates, support mortgage markets, and help to make broader financial conditions more accommodative.

The Committee will closely monitor incoming information on economic and financial developments in coming months. The Committee will continue its purchases of Treasury and agency mortgage-backed securities, and employ its other policy tools as appropriate, until the outlook for the labor market has improved substantially in a context of price stability. The Committee is prepared to increase or reduce the pace of its purchases to maintain appropriate policy accommodation as the outlook for the labor market or inflation changes. In determining the size, pace, and composition of its asset purchases, the Committee will continue to take appropriate account of the likely efficacy and costs of such purchases as well as the extent of progress toward its economic objectives.

To support continued progress toward maximum employment and price stability, the Committee today reaffirmed its view that a highly accommodative stance of monetary policy will remain appropriate for a considerable time after the asset purchase program ends and the economic recovery

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strengthens. In particular, the Committee decided to keep the target range for the federal funds rate at 0 to 1/4 percent and currently anticipates that this exceptionally low range for the federal funds rate will be appropriate at least as long as the unemployment rate remains above 6-1/2 percent, inflation between one and two years ahead is projected to be no more than a half percentage point above the Committee's 2 percent longer-run goal, and longer-term inflation expectations continue to be well anchored. In determining how long to maintain a highly accommodative stance of monetary policy, the Committee will also consider other information, including additional measures of labor market conditions, indicators of inflation pressures and inflation expectations, and readings on financial developments. When the Committee decides to begin to remove policy accommodation, it will take a balanced approach consistent with its longer-run goals of maximum employment and inflation of 2 percent.

Voting for the FOMC monetary policy action were: Ben S. Bernanke, Chairman; William C. Dudley, Vice Chairman; James Bullard; Elizabeth A. Duke; Charles L. Evans; Jerome H. Powell; Sarah Bloom Raskin; Eric S. Rosengren; Jeremy C. Stein; Daniel K. Tarullo; and Janet L. Yellen. Voting against the action was Esther L. George, who was concerned that the continued high level of monetary accommodation increased the risks of future economic and financial imbalances and, over time, could cause an increase in long-term inflation expectations.